Revised June 6, 2000

Hazardous Waste Management Act/ Resource Conservation and Recovery Act Work Plan for the Idaho National Engineering and Environmental Laboratory

EPA No. ID4890008952

CONTENTS

ACRONYMS	ii
1. INTRODUCTION	1
Appendix A—Descriptions of Idaho National Engineering and Environmental Laboratory Hazardous Waste Management Act (HWMA)/Resource Conservation and Recovery Act (RCRA) Waste Manageme Processes	nt
Appendix B—Historical Information	
Appendix C—Resource Conservation and Recovery Act Permitting Point of Contact Matrix	
TABLES	
1. Idaho Division of Environmental Quality/Idaho National Engineering and Environmental Laboratory proposed permitting schedule (removed temporarily while being revised)	2
Idaho National Engineering and Environmental Laboratory waste management processes to be closed.	3
3. Closed Idaho National Engineering and Environmental Laboratory waste management processes.	6
4. Work plan for Idaho National Environmental and Engineering Laboratory waste	8

ACRONYMS

AMWTF Advanced Mixed Waste Treatment Facility

ANL-W Argonne National Laboratory - West

ARA Auxiliary Reactor Area

ARARs applicable or relevant and appropriate requirements

ARVFS Army Reentry Vehicle Facility Site

ASB-II Air Support Building-II

BBWI Bechtel BWXT Idaho, LLC.

BNFL British Nuclear Fuels, Limited

C&S Certified and Segregated

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CFA Central Facilities Area

CFR Code of Federal Regulations

COCA Consent Order and Compliance Agreement

CPP Chemical Processing Plant

CSSF Calcined Solids Storage Facility

DOE Department of Energy

DOE-ID Department of Energy, Idaho Operations Office

DEQ Division of Environmental Quality

EBR-II Experimental Breeder Reactor-II

EIS Environmental Impact Statement

EPA Environmental Protection Agency

FA Facility Assessment

FAST Fluorinel Dissolution Process and Fuel Storage

FFA/CO Federal Facilities Agreement and Consent Order

HCRWSF Hazardous Chemical and Radioactive Waste Storage Facility

HCWHNF Hazardous Chemical Waste Handling and Neutralization Facility

HEPA high-efficiency particulate air

HFEF Hot Fuel Examination Facility

HFLS HEPA Filter Leach System

HLW high-level waste

HTRE Heat Transfer Reactor Experiment

HWMA Hazardous Waste Management Act

HWNs hazardous waste numbers

HWSA Hazardous Waste Storage Area

ICPP Idaho Chemical Processing Plant

IDHW Idaho Department of Health and Welfare

IET Initial Engine Test

ILTSF Intermediate-Level Transuranic Storage Facility

INEEL Idaho National Engineering and Environmental Laboratory

INTEC Idaho Nuclear Technology and Engineering Center

LDU land disposal unit

LET&D Liquid Effluent Treatment and Disposal

M&O management and operations

MACT Maximum Achievable Control Technology

MCC Multicurie Cell

MLLWDF Mixed Low-Level Waste Disposal Facility

MLLWTF Mixed Low-Level Waste Treatment Facility

MW mixed waste

MWSF Mixed Waste Storage Facility

NOD Notice of Deficiency

NODA Naval Ordinance Disposal Area

NON/CO Notice of Noncompliance/Consent Order

NOV/CO Notice of Violation/Consent Order

NWCF New Waste Calcining Facility

PBF Power Burst Facility

PER Power Excursion Reactor

PEW process equipment waste

PEWE process equipment waste evaporator

PMR permit modification request

POC point of contact

PREPP Process Experimental Pilot Plant

PSD permitting strategy document

PSS Primary Sodium System

PSUs Portable Storage Units

PWTU Portable Water Treatment Unit

RCRA Resource Conservation and Recovery Act

RMF Retrieval Modification Facility

RMWSF Radioactive Mixed Waste Staging Facility

ROD Record of Decision

RPSUs Repackage Portable Storage Units

RSSF Radioactive Sodium Storage Facility

RSTA Reactives Storage and Treatment Area

RSWF Radioactive Scrap and Waste Facility

RTA Request for Temporary Authorization

RTF Remote Treatment Facility

RWMC Radioactive Waste Management Complex

SCMS Sodium Components Maintenance Shop

SLRA Screening Level Risk Assessment

SMC Specific Manufacturing Capability

SPERT Special Power Excursion Reactor Test (Facilities I-IV)

SPF Sodium Process Facility

SSB Sodium Storage Building

SSS Secondary Sodium System

STP Site Treatment Plan

SWEPP Stored Waste Examination Pilot Plant

SSA SWEPP Storage Area

TAN Test Area North

TBD to be determined

TBR Trial Burn Report

THWS TAN Hazardous Waste Storage

TRA Test Reactor Area

TSA Transuranic Storage Area

TSA-R Transuranic Storage Area - Pad R

TSA-RE Transuranic Storage Area - Retrieval Enclosure

TSA-RE RMF TSA-RE Retrieval Modification Facility

TSCA Toxic Substances Control Act

VCO Voluntary Consent Order

WCF Waste Calcining Facility (located at INTEC)

WCF Waste Characterization Facility (located at RWMC)

WEDF Waste Engineering Development Facility

WERF Waste Experimental Reduction Facility

WG/WH designator for PEW system located in CPP-601

WIPP Waste Isolation Pilot Plant

WMU Waste Management Unit

WROC Waste Reduction Operation Complex

WRRTF Water Reactor Research Test Facility

WSF Waste Storage Facility

WSS WERF Stabilization System

WWSB WERF Waste Storage Building

1

1. INTRODUCTION

2	This Work Plan documents the proposed schedules for Hazardous Waste Management Act/Resource
3	Conservation and Recovery Act (HWMA/RCRA) permitting and closure activities at the Idaho National
4	Engineering and Environmental Laboratory (INEEL). This document incorporates Site Treatment Plan
5	(STP) milestones, amended Notice of Noncompliance/Consent Order (NON/CO) deadlines, and proposed
6	permit application, closure plan, and permit modification submittal dates.
7	Table 1 presents the proposed schedule for deadlines/milestones for HWMA/RCRA units located at
8	the INEEL. These deadlines/milestones include milestones identified in the STP, as well as milestones
9	identified for HWMA/RCRA permitting and closure activities. This table is currently being revised and
10	has been temporarily removed from the document.
11	Table 2 presents the status of INEEL HWMA/RCRA units to be closed under interim status.
12	Table 3 presents all closed INEEL HWMA/RCRA units.
13	Table 4 presents the work plan for INEEL HWMA/RCRA units; this table also includes historical
14	closure information.
15	Appendix A includes descriptions of INEEL HWMA/RCRA units and related historical information
16	of units closed under HWMA/RCRA regulations.
17	Appendix B provides historical information for INEEL HWMA/RCRA units.
18	Appendix C provides the RCRA permitting point of contact (POC) matrix for the INEEL.

Table 1. Idaho Division of Environmental Quality/Idaho National Engineering Laboratory proposed permitting schedule.

Resource Conservation and Recovery Act Permitting & Closure Items/Milestones	Deliverable Date
THIS TABLE IS CURRENTLY BEING REVISED – THE SCHEDULE INFORMATION SUPPLIED WHEN IT BECOMES AVAILABLE.	ATION WILL BE

Table 2. Idaho National Engineering and Environmental Laboratory waste management processes to be closed.

Process name	Location	Closure Plan Status
EBR-II Secondary Sodium (SSS) – Drain Tank System	Argonne National Laboratory-West (ANL-W)	Closure plan to be submitted to DEQ on August 1, 2000.
EBR-II Primary Sodium System (PSS) and the Intermediate Heat Exchanger (IHX)	ANL-W	Closure plan scheduled for submittal to DEQ - TBD.
EBR-II Secondary Sodium Purification System (Cold Trap)	ANL-W	Closure plan scheduled for submittal to DEQ by June 2000
CPP-601 D Cell Container Storage	Idaho Nuclear Technology and Engineering Center (INTEC)	TBD
CPP-603 Storage Tank (VES-SFE-106)	INTEC	TBD - Anticipated schedule for closure plan submittal is 2/01.
CPP-620 Hazardous Chemical Waste Handling and Neutralization Facility (HCWHNF)	INTEC	Closure plan submitted to DEQ on 9/30/99. DEQ approval of closure plan on 12/15/99. Certification of closure due to DEQ by 7/12/00.
CPP-640 Headend Holdup Storage Tanks	INTEC	TBD - Anticipated schedule for closure plan submittal is 2004.
CPP-659 New Waste Calcining Facility (NWCF) - NWCF Calciner	INTEC	Decision of whether to operate or to close this unit is to be determined by 1/31/01 (as part of the EIS). A closure plan is scheduled for submittal by 8/30/00.

 Table 2. (continued)

Process name	Location	Closure Plan Status
ICPP Tank Farm Facility	INTEC	
Pillar & Panel Vaulted Tanks (WM- 182 through WM-186) NOTE: WM-185 may be used as an emergency spare		• Closure plan submittal for tanks WM-182 & WM-183 by 12/31/00 (VCO milestone); cease use of tanks WM-182 through WM-186 by June 2003, closure plan submittal TBD.
Tank Farm Tanks: (WM-187 through WM-190)		Must cease use of these Tank Farm tanks by 12/31/12, with future closure plan submittal TBD.
• SIR/STR Tanks: (WM-103 through WM-106)		• TBD
Intermediate-Level Transuranic Storage Facility (ILTSF) - Design V Vaults (Pad 2)	Radioactive Waste Management Complex (RWMC)	TBD - Anticipated 7/01 (dependent upon funding approval).
Transuranic Storage Area -Retrieval Enclosure (TSA-RE)	RWMC	Closure plan scheduled for submittal to DEQ by 1/10/03 (to be completed by BNFL).
Waste Characterization Facility (WCF)	RWMC	Administrative closure to be completed by BBWI. Completion date - TBD.
Loss-of-Fluid Test (LOFT) tanks/sumps	Test Area North (TAN)	NOV item - submit hazardous waste determination by 9/30/01. If hazardous waste, then 90 days to submit a schedule for closure plan submittal.
TAN-616 Evaporator and Tanks	TAN	NOV item - submit hazardous waste determination by 12/31/02. If hazardous waste, then 90 days to submit a schedule for closure plan submittal.
TAN-647 Waste Storage Building	TAN	TBD

 Table 2. (continued)

Process name	Location	Closure Plan Status
Test Reactor Area (TRA)-630 Catch Tanks	Test Reactor Area (TRA)	VCO action plan date for closure plan submittal moved to 12/30/00 per February 2000 VCO update.
TRA-731 Acid/Caustic Tanks (B,C,D,E)	TRA	NOV item - Closure plan for Acid Caustic Tanks (B, C, D, E) to be submitted by 9/30/01.
TRA Sodium Loop (Fill, Storage, & Remelt Facility - FSR)	TRA	VCO action plan date for closure plan submittal moved to 9/30/00 per February 2000 VCO update.
WERF Drum Feed/Blending	Waste Reduction Operations Complex/ Power Burst Facility (WROC/PBF)	Closure plan is projected to be submitted to the DEQ by 5/31/01
WERF Incinerator	WROC/PBF	Closure plan is projected to be submitted to the DEQ by 5/31/01

Table 3. Closed Idaho National Engineering and Environmental Laboratory waste management processes.

Unit Process Name	Location	Division of Environmental Quality (DEQ) Approved Closure Date
Waste Experimental Reduction Facility (WERF) Waste Storage/Feed Tanks.	Waste Reduction Operations Complex (WROC)/Power Burst Facility (PBF)	5/16/00.
Process Experimental Pilot Plant (PREPP) Incinerator and Waste Stabilization Units	Test Area North (TAN)	3/7/00
Heat Transfer Reactor Experiment No. 3 (HTRE-3)	Experimental Breeder Reactor – I (EBR-1)	1/31/00
CPP-633 Waste Calcining Facility (WCF)	Idaho Nuclear Technology and Engineering Center (INTEC)	11/2/99*
CPP-627 Multicurie Cell (MCC)	INTEC	7/20/99
Portable Water Treatment Unit (PWTU)	WROC/Test Area North (TAN)	7/8/99
Certified and Segregated Building (C&S) and Air Support Building (ASB)-II	Radioactive Waste Management Complex (RWMC)	4/16/99
Waste Engineering Development Facility (WEDF) Storage and Waste Stabilization	WROC/PBF	12/2/97
Specific Manufacturing Capability (SMC) Calciner, Stabilization, and Storage	TAN	9/24/97
TAN-647 Sodium Storage	TAN	6/13/97
Naval Ordnance Disposal Area (NODA)	North of Central Facilities Area (CFA)	2/25/97
TAN-607A Evaporator	TAN	2/25/97
Hazardous Waste Storage Facility (HWSF)	CFA	2/4/97
TAN-681 Evaporator	TAN	12/20/96
Initial Engine Test (IET) Mercury Storage	North of TAN	12/20/96

Table 3. (continued)

Unit Process Name	Location	Division of Environmental Quality (DEQ) Approved Closure Date
Army Reentry Vehicle Facility Site (ARVFS) Storage (NaK)	South of TAN	9/12/96
CPP-666 Fluorinel Dissolution Process and Fuel Storage (FAST) - Storage and Treatment Tanks	INTEC	5/13/96
TAN-726/726A Chromate Treatment and Storage Tanks	TAN	12/26/95
ICPP Percolation Ponds	INTEC	11/29/95
Test Reactor Area (TRA)-610 Lead Storage	TRA	10/27/95
Intermediate-Level Transuranic Storage Facility (ILTSF)-Pad 1	RWMC	10/24/94
Reactives Storage and Treatment Area (RSTA)	Auxiliary Reactor Area (ARA)	10/24/94
TAN-666 Storage Tank and Treatment Units	TAN	10/20/94
ARVFS Chemical Treatment Unit	South of TAN	9/9/94
CPP-663 Hot Shop Storage Tank	INTEC	8/22/94

^{*}In accordance with Section 5 of the approved closure plan, substantive post-closure care requirements for the WCF will be addressed under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as applicable or relevant and appropriate requirements (ARARs) under the final Record of Decision (ROD) and Post-ROD Monitoring Plan.

Table 4. Work plan for the Idaho National Engineering and Environmental Laboratory waste management units.

Volume Number	ork plan for the Idaho National Engineering	Process Code(s)	Process Type(s)	Location	Waste Type(s)	Unit Status
Volume 1	Hazardous Waste Management Act (HWMA)/Resource Conservation and Recovery Act (RCRA) Part A Permit Application for the Idaho National Engineering and Environmental Laboratory (INEEL) - Bechtel BWXT Idaho, LLC					The January 2000 Revision of the Part A Permit Application for the INEEL, Volume 1, Books 1 & 2 was approved by the DEQ on 4/3/00.
Volume 2	RCRA Part A Permit Application for the INEEL - Argonne National Laboratory-West (ANL-W)					Last approved Part A Permit Modification Request was approved by the DEQ on 1/4/99.
Volume 3	General Information for INEEL Waste Management Units					Partial permits for the INEEL have been approved by the DEQ. Volume 3 is currently being revised and the completed revision will be transmitted to the DEQ.
Volume 4	ANL-W Storage Units Part B: Radioactive Scrap and Waste Facility (RSWF) Radioactive Sodium Storage Facility (RSSF) Hot Fuel Examination Facility (HFEF) Sodium Storage Building (SSB)	S01 S01 S01 S01	1 1 1	ANL-W ANL-771 ANL-797 ANL-785 ANL-703	A/C A/C/D A/C A/D	NOTE: Permitted 1/24/94 NOTE: Permitted 1/24/94 NOTE: Permitted 12/99 NOTE: Permitted 12/99
Volume 5	Intermediate-Level Transuranic Storage Facility (ILTSF) - Pad 2 Radioactive Waste Management Complex (RWMC) Waste Storage Facility Stored Waste Examination Pilot Plant (SWEPP) Transuranic Storage Area (TSA)-3	S01 S01 S01	1 1 1	RWMC RWMC RWMC	A/C A/C A/C	NOTE: Permitted 11/13/95 NOTE: Permitted 11/13/95 NOTE: Permitted 9/30/96
Volume 6 (This Volume is now considered inactive)	New Waste Calcining Facility (NWCF) Calciner NWCF Storage & Treatment Tanks	T04 S02, T01	4d 2, 4c	Idaho Nuclear Technology and Engineering Center (INTEC) - CPP-659 INTEC - CPP-659	A/B/C	Interim Status NOTE: Operating per NOV/CO Interim Status
Volume 7	Hazardous Waste Storage Facility (HWSF)	S01	1	Central Facilities Area (CFA)-637	D	NOTE: Closed 2/4/97

Volume Number	Waste Management Process*	Process Code(s)	Process Type(s)	Location	Waste Type(s)	Unit Status
Volume 8	Hazardous Chemical Waste Handling and Neutralization Facility (HCWHNF)	S02, T01	2	INTEC - CPP-620 Annex	D D	NOTE: Permitted 5/1/95. Currently undergoing closure activities.
Volume 9	Waste Experimental Reduction Facility (WERF) Incinerator WERF Waste Stabilization WERF/Mixed Waste Storage Facility (MWSF) Waste Repackaging (pretreatment)	T03 T04 T04	3a 4a 41	Waste Reduction Operations Complex (WROC) /Power Burst Facility (PBF) PER-609 WROC/PBF - Special Power Excursion Reactor Test (SPERT)- III WROC/PBF - SPERT III	A/D A/D	Interim Status Interim Status Interim Status
Volume 10 (Or TBD Vol. # Volume 10 is now considered inactive)	Liquid Effluent Treatment & Disposal (LET&D) Evaporators LET&D Storage Tank LET&D Nitric Acid Recycle Tank PEW Condensate/Feed Storage Tanks Fluorinel and Fuel Storage Facility Debris Storage* NWCF Evaporator Tank System* NWCF HEPA Filter Leaching System* *NOTE: These units have been incorporated into Volume 18 Part B Permit Application	T04 S02, T01 S02 S02 S02, T01 S01 T04 S02, T01	4d 2 2 2 2, 4c 1 4f 2, 4i	INTEC - CPP-1618 INTEC - CPP-1618 INTEC - CPP-1618 INTEC - CPP-1618 INTEC - CPP-604 INTEC - CPP-666 FDP Cell INTEC - CPP-659 INTEC - CPP-659	A A A A A A A	Interim Status Interim Status to be requested Interim Status
Volume 11	MWSF MWSF Portable Storage Units (PSUs) WERF Waste Storage Building (WWSB) WERF Macroencapsulation and Sizing * Test Area North (TAN) Hazardous Waste Storage ** * NOTE: Incorporated from Vol. 19 Part B Permit Appl. **NOTE: Incorporated from Vol. 12 Part B Permit Appl.	S01 S01 S01 T04 S01	1 1 1 4i,4b 1	WROC/PBF - PER-613 WROC/PBF - SPERT IV WROC/PBF - PER-623 WROC/PBF - PER-622 TAN-628	A/D A/D A/D A/D A/D	Permitted 1/27/00 Permitted 1/27/00 Permitted 1/27/00 Permitted 1/27/00 Permitted 1/27/00
Volume 12	TAN Hazardous Waste Storage (THWS) NOTE: This information was incorporated into Vol. 11 Part B Permit Appl., per NOD from DEQ. This volume is no longer needed.	S01	1	TAN-628	A/D	See Volume 11 information
Volume 13 (This Volume is now considered inactive)	Transuranic Storage Area-Retrieval Enclosure (TSA-RE) Retrieval Modification Facility Waste Characterization Facility (WCF) at RWMC NOTE: These units will not be permitted - this volume is no longer needed.	S01 S01	1 1, 4a, 4c	RWMC RWMC	A/C A/C	Interim Status Interim Status

Volume			Process		Waste	
Number	Waste Management Process*	Process Code(s)	Type(s)	Location	Type(s)	Unit Status
Volume 14 NOTE: Volume	Calcined Solids Storage Facility (CSSF) - New Volume number - TBD when necessary	S02	2	INTEC	A/B/C	Interim Status
14 permit	Process Equipment Waste (PEW) Evaporator	T04	4d	INTEC CPP-604	A	Interim Status
application is	PEW Feed Storage and Treatment Tanks - including the	S02, T01	2, 4c	INTEC CPP-604, CPP-601	A	Interim Status
currently being revised	following newly designated PEW feed system tanks: • CPP-601 WG/WH Cells Storage and Treatment Tanks	S02, T01 S02, T01	2, 4c 2, 4c	INTEC CPP-601	A	Interim Status
	(VES-WG-100, -101, VES-WH-100, -101) • CPP-641 Westside Holdup Storage Tanks (VES-WL-103, -104, -105)	S02	2	INTEC CPP-641	A	Interim Status
	CPP-604 Tank Farm Tanks (VES-WM-100, -101, and -102)	S02	2	INTEC CPP-604	A	Interim Status
Volume 15	Army Reentry Vehicle Facility Site (ARVFS) Sodium- Potassium Waste Treatment at ANL-W	T04	4c	ANLW	A	ARVFS Treatment closed 9/9/94
	Sodium Components Maintenance Shop (SCMS) NOTE: SCMS incorporated into Volume 16, this volume is no longer needed.	S01, S02, T01, T04	1, 2, 4a, 4c, 4j	ANL-793		SCMS - see Volume 16
Volume 16	ANL-W Treatment Units Part B Sodium Process Facility (SPF) Sodium Components Maintenance Shop (SCMS) Remote Treatment Facility (RTF)	S01, S02, T01, T04 S01, S02, T01, T04 S01, T04	1, 2, 4c 1, 2, 4a, 4c, 4j 1, 4	ANL-799 ANL-793 ANL-785	A/D A/D A/B/C	NOTE: Permitted 1/24/97 Interim Status New Facility
Volume 17	Radioactive Mixed Waste Staging Facility (RMWSF) Hazardous Chemical and Radioactive Waste Storage	S01 S01	1 1	INTEC CPP-1617 INTEC CPP-1619	A/D A/D	Interim Status Interim Status
	Facility (HCRWSF) NOTE 1: CPP-601/627 Container Storage removed from Volume 17, per NOD from DEQ. NOTE 2: The information found in this volume will be incorporated into the Volume 18 RCRA Partial Permit within 180 days of its issuance, per request of the DEQ.	S01	1	INTEC CPP-601/627	В	Interim Status NOTE 3: CPP-627 (Multicurie Cell) closed 7/20/99
Volume 18	NWCF Debris Storage	S01, S03	1, 5	INTEC CPP-659	A/C	Interim Status
. Statile 10	NWCF High Efficiency Particulate Air (HEPA) Filter Leach System (HFLS)	T01	4c	INTEC CPP-659	A/C	Interim Status
	NWCF Debris Treatment	T04	1, 4c, 4i, 4j, 4k,	INTEC CPP-659	A	New Facility
	Fluorinel Dissolution Process and Fuel Storage (FAST) Debris Storage	S01	4l, 6 1	INTEC CPP-666	A/C	Interim Status
	NWCF Storage & Treatment Tanks (NCD-123, NCD-129)	S02, T01	2, 4c	INTEC CPP-659	A/C	Interim Status

Volume	W A M	D G 1()	Process	T	Waste	TI ** G* 4
Number	Waste Management Process*	Process Code(s)	Type(s)	Location	Type(s)	Unit Status
Volume 19	WERF Macroencapsulation WERF Sizing NOTE: This information was incorporated into Volume 11, this volume is no longer needed.	T04 T04	4i 4b	WROC/PBF - SPERT III WROC/PBF - SPERT III	A/D A/D	See Volume 11 information
Volume 20	Mercury Retort NOTE: This unit will not be constructed - this volume is no longer needed.	T04	4d	WROC/PBF	A/D	New Facility
TBD	Calcined Solids Storage Facility (CSSF)	S02	2	INTEC	В	Interim Status
No Volume Number (N/A)	HWMA/Toxic Substances Control Act (TSCA) Part B Permit Application for the Advanced Mixed Waste Treatment Facility (AMWTF) - British Nuclear Fuels, Limited			RWMC		New Facility
N/A	ARVFS NaK Storage Unit	S01	1	ARVFS	A, D	NOTE: Closed 9/12/96
N/A	CPP-601 D Cell Storage	S01	1	INTEC CPP-601	A	Interim Status NOTE: This unit is to be closed under interim status.
N/A	CPP-603 Storage Tank (VES-SFE-106)	S02	2	INTEC CPP-603	A	Interim Status NOTE: This unit to be closed under interim status.
N/A	CPP-627 Multicurie Cell (MCC)	S01	1	INTEC CPP-627	A	NOTE: Closed 7/20/99
N/A	CPP-633 Waste Calcining Facility (WCF) Evaporator	Т04	4h	INTEC CPP-633	A/B	NOTE: Closed 11/2/99
N/A	CPP-633 WCF HEPA Filter Storage	S03	5	INTEC CPP-633	A/B	NOTE: Closed 11/2/99
N/A	CPP-633 WCF Storage Tanks	S02	2	INTEC CPP-633	A/B	NOTE: Closed 11/2/99

Volume Number	Waste Management Process*	Process Code(s)	Process Type(s)	Location	Waste Type(s)	Unit Status
N/A	CPP-640 Headend Holdup Storage Tanks	S02	2	INTEC CPP-640	A	Interim Status
N/A	CPP-663 Hot Shop Storage Tank	S02	2	INTEC CPP-663	A	NOTE: Closed 8/22/94
N/A	CPP-666 FAST Storage and Treatment Tanks	S02, T01	2, 4c	INTEC CPP-666	D	NOTE: Closed 5/13/96
N/A	EBR-II Secondary Sodium System (SSS)	S01, S02	1, 2	ANL-766	A	Interim Status NOTE: This unit is to be closed under interim status.
N/A	EBR-II Primary Sodium System (PSS)	S02	2	ANL-W ANL-767	A	Interim Status NOTE: This unit is to be closed under interim status.
N/A	Evaporator at TAN-607A	S01, T04	1, 4f	TAN-607	A, D	NOTE: Closed 2/25/97
N/A	Evaporator at TAN-681	S01, T04	1, 4f	TAN-681	A, D	NOTE: Closed 12/20/96
N/A	Heat Transfer Reactor Experiment (HTRE)-3 Assembly	S01	1	EBR-1	A	NOTE: Closed 1/31/00
N/A	ICPP New Tank Farm	S02	2	INTEC	A/B	Interim Status NOTE: These tanks have interim status, but have not been built.
N/A	ICPP Percolation Ponds	T02	4h	INTEC	A/B	NOTE: Closed 11/29/95
N/A	ICPP Tank Farm Facility NOTE: The CPP-604 Tank Farm Tanks (VES-WL-100, VES-WL-101, and VES-WL-102) will be permitted as feed, storage and bottoms tanks in the PEWE Part B Permit Application (Volume 14).	S02	2	INTEC	A/B/C	Interim Status NOTE: Tanks VES-WM-180 through VES-WM-190 operate under NON/CO and will be closed per schedule outlined in the NON/CO.
N/A	Initial Engine Test (IET) Mercury Storage	S01	1	TAN	A	NOTE: Closed 12/20/96

Volume Number	Waste Management Process*	Process Code(s)	Process Type(s)	Location	Waste Type(s)	Unit Status
N/A	ILTSF Pad 1	S01	1	RWMC	A	NOTE: Closed 10/24/94
N/A	Portable Water Treatment Unit (PWTU)	S01, T04	1, 4g	PBF/WROC	A, D	NOTE: Closed 7/8/99
N/A	Process Experimental Pilot Plant (PREPP) Incinerator	Т03	3b	TAN	A, D	NOTE: Closed 3/7/00
N/A	PREPP Waste Stabilization	Т04	4a	TAN	A, D	NOTE: Closed 3/7/00
N/A	Reactives Storage and Treatment Area (RSTA)			Auxiliary Reactor Area (ARA)-IV		NOTE: Closed 10/24/94
N/A	Specific Manufacturing Capability (SMC) Waste Calciner, Stabilization & Storage	S01, S02, T04, X03	1, 2, 4a, 4d	TAN-681	A	NOTE: Closed 9/24/97
N/A	TAN-647 Sodium Storage	S01	1	TAN-647	A	NOTE: Closed 6/13/97
N/A	TAN-647 Waste Storage Building	S01	1	TAN-647	A	Interim Status NOTE: This unit is to be closed under interim status.
N/A	TAN-726 Chromate Water Storage	S01, S02, T04	1, 2, 4c	TAN-726	A	NOTE: Closed 12/26/95
N/A	TAN-726A Chromate Water Treatment Unit	S01, S02, T04	1, 2, 4c	TAN-726A	A	NOTE: Closed 12/26/95
N/A	Test Reactor Area (TRA)-610 Lead Storage	S01	1	TRA-610	A, D	NOTE: Closed 10/27/95
N/A	Air Support Building (ASB)-II (TSA-2)	S01	1	RWMC	A	NOTE: Closed 4/16/99
N/A	Certified and Segregated (C&S) Building (TSA-3)	S01	1	RWMC	A	NOTE: Closed 4/16/99
N/A	Waste Experimental Development Facility (WEDF) Storage	S01	1	PBF/WROC - SPERT II	A, D	NOTE: : Closed 12/2/97

Volume Number	Waste Management Process*	Process Code(s)	Process Type(s)	Location	Waste Type(s)	Unit Status
N/A	WERF Drum Feed/Blending	T04	4e	PBF/WROC - SPERT III	A/D	NOTE: Closed 5/16/00
N/A	WERF Waste Storage/Feed Tanks	S02, T01	2, 4e	PBF/WROC	A, D	Interim Status NOTE: These tanks have interim status, but have not been built; an administrative closure will be done.
N/A	Naval Ordinance Disposal Area (NODA) Treatment			North of CFA		NOTE:: Closed 2/25/97

^{*} For the purposes of this work plan, the term "Waste Management Process" is used to designate a functional grouping of one or more hazardous waste management units as defined in 40 CFR 260.10.

NOTE: HWMA/RCRA Permit Volumes (and their associated information) which are no longer needed, due to changes in permitting strategy, have been shaded gray.

Process Types

- 1. Container Storage
- 2. Tank Storage
- 3. Incineration
 - a. controlled air
 - b. rotary kiln
- 4. Treatment
 - a. stabilization/solidification
 - b. volume reduction shredding/compacting/sizing
 - c. chemical treatment
 - d. thermal treatment
 - e. blending
 - f. evaporation
 - g. ion exchange
 - h. surface impoundment treatment
 - i. macroencapsulation
 - j. physical treatment (debris)
 - k. microencapsulation
 - repackaging
- 5. Waste Pile
- 6. Containment Building

Process Codes

S01	Container Storage
S02	Tank Storage
S03	Waste Pile Storage
T01	Tank Treatment
T02	Surface Impoundment Treatment
T03	Incineration

Waste Types

- A. Low-Level Mixed Any byproduct material radioactive waste that is not high-level waste, transuranic waste, or spent nuclear fuel. This definition is not dependent on radiation levels. This waste is hazardous as defined in 40 CFR 261.
- B. High-Level Mixed The waste radioactive material that results from the reprocessing of spent nuclear fuel. This includes the liquid waste produced directly from the reprocessing and any solid waste derived from the liquid waste that would warrant permanent isolation due to its fission product/transuranic concentrations. This waste is hazardous as defined in 40 CFR 261.
- C. TRU Mixed Radioactive waste which is contaminated with alpha particle-emitting transuranium radionuclides (atomic number greater than 92) in concentrations greater than 100 nCi/g. The TRU designation is not dependent on the origin or the form of the waste and is hazardous as defined in 40 CFR 261.
- D. Hazardous As defined in 40 CFR 261.
- E. Undetermined.

NOTE: These definitions are intended to provide a basic understanding and are not intended to be all-inclusive.

Appendix A

Descriptions of Idaho National Engineering and
Environmental Laboratory
Hazardous Waste Management Act/
Resource Conservation and Recovery Act
Waste Management Processes

Descriptions of Idaho National Engineering and Environmental Laboratory 1 Hazardous Waste Management Act/Resource Conservation and Recovery Act 2 **Waste Management Processes** 3 DOE-CH Operating Contractor - ARGONNE NATIONAL LABORATORY-4 WEST (ANL-W) 5 To be Permitted 6 7 Sodium Components Maintenance Shop (SCMS) 8 The SCMS consists of a treatment system and ancillary equipment located in 9 Building ANL-793. The SCMS will be used to store and treat sodium, sodium 10 potassium alloy (NaK), and characteristic mixed waste prior to final disposition. 11 Remote Treatment Facility (RTF) 12 The RTF will consist of a hazardous waste management unit(s) possibly located within the Hot Fuel Examination Facility (HFEF), Building ANL-785. The 13 14 unit(s) will be used to treat and repackage characteristic and listed remote-handled 15 mixed waste, prior to final disposition. 16 To be Closed 17 Experimental Breeder Reactor-II (EBR-II) Primary Sodium System (PSS) 18 The PSS consists of tank (system) storage located in Building ANL-767. 19 Following termination, the PSS will contain sodium and NaK (characteristic 20 mixed waste) resulting from EBR-II operations. The mixed waste will be 21 removed from the unit/facility and treated, prior to final disposition. EBR-II Secondary Sodium System (SSS) 22 23 The EBR-II SSS consists of container and tank (system) storage located in 24 Building ANL-766. The EBR-II SSS contains sodium and NaK (characteristic 25 mixed waste) used during EBR-II operations. The mixed waste will be removed from the unit/facility and treated, prior to final disposition. 26 27 **Permitted** 28 Radioactive Sodium Storage Facility (RSSF) 29 The RSSF consists of cargo containers (permit allows for up to 32 cargo 30 containers) located in the Outside Radioactive Storage Area, designated as 31 Building ANL-797. The facility is permitted to store characteristic mixed waste, 32 prior to treatment and final disposal.

1 Radioactive Scrap and Waste Facility (RSWF) 2 The RSWF is a controlled-access, fenced, 4-acre area located 0.5 miles northeast 3 of EBR-II, designated as Building ANL-771. The facility is permitted to store 4 characteristic mixed waste prior to treatment and/or final disposal. 5 Sodium Process Facility (SPF) 6 The SPF is a new facility consisting of container storage, tank storage and tank 7 treatment and is designated as Building ANL-799. The facility is used to convert 8 sodium and NaK (characteristic mixed waste) into a low-level radioactive solid sodium hydroxide waste that is not RCRA hazardous, prior to final disposition. 9 10 Building 703, Sodium Storage Building (SSB) 11 The SSB is a controlled-access, metal building located directly west of the 12 Radioactive Sodium Storage Facility (RSSF) and is designated as Building ANL-703. The facility is used to store sodium (characteristic waste), prior to 13 14 treatment and final disposition. 15 Hot Fuel Examination Facility (HFEF) 16 The HFEF consists of five hazardous waste management units located on the main floor and/or the high bay area in the HFEF, Building ANL-785. These units are 17 18 used to store, characterize and repackage characteristic and listed mixed waste 19 prior to shipment to the Waste Isolation Pilot Plant (WIPP), or other approved 20 disposal facilities for final disposition. DOE-ID OPERATING CONTRACTOR - Bechtel BWXT Idaho, LLC. 21 22 To Operate under Interim Status/Consent Order 23 CPP-659 New Waste Calcining Facility (NWCF) Calciner 24 The calciner (VES-NCC-105) treats (T04) liquid mixed waste from the Tank 25 Farm Facility by changing the waste form from liquid into calcine, that is sent to the Calcined Solids Storage Facility (CSSF). A decision will be made by 1/31/01 26 27 whether to close this unit or proceed with obtaining a RCRA Part B permit, per 28 conditions of the Consent Order. 29 ICPP Tank Farm Facility 30 The ICPP Tank Farm Facility stores (S02) liquid mixed waste from operational activities at the Idaho Nuclear Technology and Engineering Center (INTEC). 31 32 Tanks VES-WM-100, VES-WM-101, and VES-WM-102 will be permitted as 33 feed, storage, and bottoms tanks in the PEW Evaporator Part B Permit Application (Volume 14). 34

1 To be Permitted 2 Calcined Solids Storage Facility (CSSF) 3 The CSSF receives and stores (S02) calcined waste directly from the New Waste 4 Calcining Facility (NWCF) calciner. The CSSF consists of the following: 5 4 tanks (CPP-729 Bin Set #1) 6 7 tanks (CPP-742 Bin Set #2) 7 7 tanks (CPP-746 Bin Set #3) 8 3 tanks (CPP-760 Bin Set #4) 9 7 tanks (CPP-765 Bin Set #5) 10 7 tanks (CPP-791 Bin Set #6) 11 7 tanks (CPP-795 Bin Set #7) 12 CPP-601 WG/WH Cells Storage and Treatment Tanks 13 This unit consists of four tanks (VES-WG-100, VES-WG-101, VES-WH-100, 14 and VES-WH-101) used for storage and treatment (S02 and T01). These tanks receive waste primarily from laboratories and process operations in CPP-601, 15 CPP-602, and CPP-684 located at the Idaho Nuclear Technology and Engineering 16 17 Center (INTEC). The waste is sent to the PEW Feed/Storage and Treatment 18 Tanks prior to evaporation in the PEW evaporators. Present plans are to permit these tanks as part of the PEW Evaporator System - Volume 14. 19 20 CPP-604 Process Equipment Waste (PEW) Condensate/Feed Storage and Treatment 21 Tanks 22 This unit consists of three storage (S02) and treatment (T01) tanks (VES-WL-106, 23 VES-WL-107, and VES-WL-163). These tanks receive condensate from the 24 PEW Evaporator prior to going to the LET&D Storage Tanks and eventually the 25 LET&D Evaporators. Present plans are to permit these tanks as part of the 26 LET&D system - Volume 10. 27 CPP-604 PEW Evaporators (PEWE) 28 This unit consists of treatment (T04) in two evaporators (EVAP-WL-129 and 29 EVAP-WL-161). After waste is treated in this unit, it is transferred to the Tank 30 Farm Facility or the LET&D Facility, where the nitric acid is reclaimed for reuse. 31 Present plans are to permit these tanks as part of the PEW Evaporator System -32 Volume 14.

1 CPP-604 PEW Feed/Storage and Treatment Tanks 2 Presently, this unit consists of three tanks (VES-WL-102, VES-WL-132, and 3 VES-WL-133), used for the storage (S02) and treatment (T01) of liquid waste 4 prior to being treated in the PEW Evaporator. A permit modification request 5 (PMR) is in-progress to add tanks VES-WL-101 and VES-WL-111 to this unit. 6 Presents plans are to permit these tanks as part of the PEW Evaporator System -7 Volume 14. 8 CPP-604 Tank Farm Tanks 9 This unit currently consists of four storage (S02) tanks [VES-WM-100, VES-10 WM-101, VES-WM-102, and VES-WL-101 (a PMR to make tank VES-WL-101 11 part of the PEW Feed Storage and Treatment Tanks unit is presently in-progress)]. 12 These tanks receive mixed waste for storage prior to transfer to the NWCF or the 13 ICPP Tank Farm Tanks. Present plans are to permit these tanks as part of the 14 PEW Evaporator System - Volume 14. CPP-641 Westside Holdup Storage Tanks 15 This unit consists of three storage tanks (VES-WL-103, VES-WL-104, and VES-16 17 WL-105). These tanks are used for storage (S02) of liquid wastes prior to 18 evaporation in the PEW evaporators or transferred to the Tank Farm Facility. 19 Present plans are to permit these tanks as part of the PEW Evaporator System -Volume 14. 20 21 CPP-659 NWCF Debris Treatment 22 This unit does not have interim status. Treatment will include physical and 23 chemical extraction (T04) of debris waste. This unit is to be permitted as part of 24 the NWCF Debris Treatment Processes - Volume 18. 25 CPP-659 NWCF Evaporator Tank System 26 The NWCF Evaporator (EVAP-NCC-150) condenses/treats (T04) the liquid 27 waste from the Tank Farm Facility, prior to being treated in the NWCF Calciner. 28 CPP-659 NWCF High Efficiency Particulate Air (HEPA) Filter Leach System (HFLS) 29 The HEPA Filter Leach System was designed to treat (T01) contaminated high 30 efficiency particulate air (HEPA) filters by nitric acid leaching followed by water rinsing (in tank VES-NCD-141) and then air drying (in tank VES-NCD-142) to 31 meet the debris treatment standards. These tanks are to be permitted as part of the 32 33 NWCF HEPA Filter Leaching System - Volume 18.

1 CPP-659 NWCF HEPA Filter (Debris) Storage 2 This unit consists of container storage (S01) and waste pile (S03) storage areas. 3 Spent HEPA filter and/or other debris-type wastes are stored in this unit prior to 4 treatment in the HFLS, or prior to other debris treatment. This unit is to be 5 permitted as part of the NWCF Debris Storage - Volume 18. CPP-659 NWCF Storage and Treatment Tanks 6 7 This unit consists of eight storage (S02) and treatment (T01) tanks [VES-NCC-8 101, VES-NCC-102, VES-NCC-103 (feed storage/treatment tanks), VES-NCC-9 108 (storage/treatment tank), VES-NCC-119, VES-NCC-122, VES-NCD-123, 10 and VES-NCD-129 (storage/treatment tanks)]. These tanks perform multiple 11 functions such as feed preparation for the NWCF, storage of quench solutions 12 from the NWCF off-gas clean-up system, collection of liquid from cell floor drains, or collection of debris treatment effluent. Tanks VES-WM-123 and VES-13 14 WM-129 are to be permitted as part of the NWCF Storage and Treatment Tanks -15 Volume 18. CPP-666 Fluorinel Dissolution Process and Fuel Storage (FAST) HEPA Filter (Debris) 16 17 Storage 18 This is a container storage (S01) unit prior to debris treatment. This unit is to be 19 permitted as part of the FAST Debris Storage - Volume 18. CPP-1617 Radioactive Mixed Waste Staging Facility (RMWSF) 20 21 This unit is a container storage (S01) area for radioactive, hazardous, and mixed 22 hazardous waste, prior to waste treatment and disposal. Containers are located 23 within a fenced area that surrounds Building CPP-1617. Additionally, sorting and 24 segregation of RCRA waste is performed within this facility. 25 CPP-1618 Liquid Effluent Treatment and Disposal (LET&D) Evaporators 26 This unit consists of two evaporators, also referred to as fractionators 27 (FRAC-WLL-170 and FRAC-WLK-171). These evaporators/fractionators treat 28 (T04) the condensate from the PEWEs. 29 CPP-1618 LET&D Nitric Acid Recycle Storage Tank 30 This tank (VES-NCR-171) stores (S02) recycled nitric acid from the LET&D 31 prior to the nitric acid being used in the NWCF Calciner or being sent to the ICPP Tank Farm. 32

1 CPP-1618 LET&D Storage Tanks 2 Tank VES-WLK-197 stores condensate from the PEWEs prior to the condensate 3 being treated in the LET&D Evaporators. Tank VES-WLL-195 collects and 4 stores the acid produced in the LET&D for use at the NWCF or the PEWE. 5 These tanks do not have interim status. CPP-1619 Hazardous Chemical and Radioactive Waste Storage Facility (HCRWSF) 6 7 This unit consists of container storage (S01) prior to further waste treatment and 8 disposal. 9 **WERF** Repackaging 10 Waste repackaging (T04) is conducted in Room 102 of the MWSF and Room B102 of Building PER-609. Waste repackaging is primarily done to support 11 12 mixed waste incineration at the WERF, but may also be used for other associated 13 operational activities. 14 WERF Waste Stabilization System 15 This waste stabilization system/unit (T04) is located at the PBF/WROC, within 16 Building PER- 609, room 109. This unit is typically used to treat WERF flyash 17 and WERF hearth ash. Treatment is done via chemical conditioning (adding and 18 blending chemical additives) of the waste, resulting in binding the hazardous 19 constituents in the waste, so that the treated waste meets RCRA Land Disposal 20 Restrictions (LDRs). 21 To be Closed 22 CPP-640 Headend Holdup Storage Tanks 23 This unit consists of 3 storage (S02) tanks (VES-HW-100, VES-HW-101, VES-HW-102) which were used in the fuel dissolution process at the INTEC. 24 25 ICPP Tank Farm Facility 26 These tanks store (S02) liquid wastes from operational activities at the INTEC. Only tanks VES-WM-180 through VES-WM-190 are to be closed. 27 CPP-603 Storage Tank 28 29 This unit consists of a tank (VES-SFE-106) used for waste storage (S02) and 30 treatment (T01) at the INTEC.

1 CPP-601 D Cell Storage 2 This unit consists of container (S01) storage located in Building CPP-601 at the 3 4 Hazardous Chemical Waste Handling and Neutralization Facility (HCWHNF) 5 This unit consists of 2 storage (S02) and treatment (T01) tanks (VES-HBF-103, VES-HBF-104) which are designed to treat liquid waste from the pilot plant area 6 7 storage tank (VES-HBF-105). 8 **NOTE:** This RCRA permitted unit is currently undergoing closure activities. 9 TAN-647 Waste Storage Facility 10 This process consists of a container storage (S01) unit encompassing the north half of Building TAN-647 and the asphalt pad located directly north of the 11 12 building. Transuranic Storage Area-Retrieval Enclosure (TSA-RE)* 13 14 The TSA-RE (WMF-636) is a weather-tight metal building over TSA Pad R and 15 Pad 1, with an adjacent wing over Pad 2. The building covers (S01) the waste 16 stack, berms and sloped earth. The work area within the TSA-RE encloses the earth overburden that will be removed to expose waste containers. 17 18 *This unit will be closed by British Nuclear Fuels, Limited (BNFL). 19 Waste Characterization Facility (WCF) at the Radioactive Waste Management Complex 20 (RWMC) 21 This unit was to be comprised of two container storage areas, container storage in 22 glove boxes, and 4 small-scale treatment processes in glove boxes. These would 23 be located in a structure to be built south of Building WMF-612 within the TSA, 24 at the RWMC. (It has been decided that this unit will not be constructed.) 25 WERF Drum Feed/Blending 26 The drum feed/blending (T04) unit is located in Building PER-609, Room 111A. 27 It consists of a concrete pad, a stainless-steel secondary containment pan, a liquid 28 waste feed pump, two filters, and associated feed lines and piping (only up to the 29 wall separating Rooms 111 and 111A). 30 Waste Experimental Reduction Facility (WERF) Incinerator 31 The WERF Incinerator is located at the Waste Reduction Operations Complex 32 (WROC)/Power Burst Facility (PBF), within Building PER-609. The unit is 33 comprised of an incinerator (T03) and its auxiliary equipment, which are located 34 in Room 108 (incinerator, heat exchanger, and solid waste feed lines), Room 101 35 (air pollution control system and solid waste feed system), and Room B109 (ash 36 collection & handling systems). Room B111 houses the incinerator control

1 consoles. 2 **Permitted** 3 Mixed Waste Storage Facility (MWSF) 4 The MWSF consists of a container storage (S01) unit within the basement and 5 Room 101 and Room 102 on the main floor of Building PER-613. The unloading area is located in the high bay on the main floor. 6 7 Mixed Waste Storage Facility - Portable Storage Units (MWSF-PSUs) 8 This is a container storage (S01) unit consisting of multiple cargo containers. The 9 cargo containers are located on the asphalt pad in the MWSF area. 10 WERF Waste Storage Building (WWSB) 11 This unit is located at the PBF/WROC, within Building PER-623. The unit consists of multiple container storage (S01) rooms. 12 13 WERF Macroencapsulation 14 The location for this treatment unit (T04) is at the PBF/WROC, in Building PER-15 622. The unit prototype has been constructed. 16 **WERF Sizing** 17 This is a new unit that has been constructed at the PBF/WROC, in Building PER-18 622. This unit is used to size radioactive low-level waste is permitted to size mixed low-level waste. 19 20 Test Area North (TAN) Hazardous Waste Storage (THWS) 21 This unit consists of two container storage (S01) areas (Rooms 100 and 105) and 22 one loading and unloading bay (Room 100A) located in the THWS building 23 (TAN-628). 24 **HCWHNF** 25 This unit consists of two storage (S02) and treatment (T01) tanks (VES-HBF-103 and VES-HBF-104) designed to treat liquid waste from the pilot plant area storage 26 27 tank (VES-HBF-105). NOTE: This unit is currently undergoing closure activities. 28 29 Intermediate-Level Transuranic Storage Facility (ILTSF) - Pad 2 30 This unit is a container storage (S01) unit that consists of carbon-steel cylindrical 31 vaults that have been installed vertically in the ground and encased in sand-32 cement grout. This unit is located in the southwest corner of the Transuranic

Storage Area (TSA). 1 2 **RWMC** Waste Storage Facility 3 This is a container storage (S01) unit that consists of up to seven Type II storage 4 modules located east of TSA-3, and one Type I storage module located north of 5 TSA-3, at the RWMC. 6 Stored Waste Examination Pilot Plant (SWEPP) TSA-3 7 This unit is a container storage (S01) unit located at the RWMC (Building WMF-8 610). The unit consists of two storage areas: Rooms 101 and 102. The SWEPP is 9 constructed on a concrete foundation, on a portion of the TSA, Pad 3 (TSA-3). 10 **Historical Closure Information** 11 Army Reentry Vehicle Facility Site (ARVFS) - NaK storage 12 This was a container storage (S01) unit located approximately one mile east of 13 Lincoln Boulevard, about 2.5 miles northeast of the Naval Reactor Facility. It was 14 an underground bunker containing two stainless-steel drums and two carbon-steel 15 containers within a metal dumpster. Closure approved by the DEQ on 9/12/96. 16 **ARVFS Chemical Treatment Unit** 17 Closed 9/9/94 18 Air Support Building (ASB) II - (TSA-2) 19 This container storage (S01) unit was the smaller of two, air-supported, storage 20 buildings located at the RWMC. It was constructed on an asphalt pad, which covered the Transuranic Storage Area (TSA), Pad 2 (or TSA-2). Closure 21 22 approved by the DEQ on 4/16/99. 23 Certified and Segregated (C&S) Building - (TSA-3) 24 This container storage (S01) unit was the larger of two, air-supported, storage 25 buildings located at the RWMC (Building WMF-612). It was constructed with 26 steel reinforcement, on an asphalt pad, over a portion of the Transuranic Storage 27 Area, Pad 3 (or TSA-3). Closure approved by the DEQ on 4/16/99. 28 CPP-627 Multicurie Cell (MCC) 29 This was a container storage unit (S01), located in Building CPP-627 at the 30 INTEC. Administrative closure approved by the DEQ on 7/20/99.

1 CPP-633 Waste Calcining Facility (WCF) Evaporator 2 This unit consisted of an evaporator (EVAP-WC-114) and its ancillary piping, 3 which evaporated (T04) liquid mixed waste generated from fuel reprocessing 4 activities at the INTEC. Closure approved by the DEQ on 11/2/99, with the 5 caveat that the substantive post-closure care requirements for the WCF be 6 addressed under the CERCLA ARARs under the final ROD and Post-ROD 7 Monitoring Plan. CPP-633 WCF Storage Tanks 8 9 This unit consisted of four storage (S02) tanks (VES-WC-100, VES-WC-101, 10 VES-WC-108, and VES-WC-119), located in Building CPP-633 at the INTEC. 11 Closure approved by the DEQ on 11/2/99, with the caveat that the substantive 12 post-closure care requirements for the WCF be addressed under the CERCLA 13 ARARs under the final ROD and Post-ROD Monitoring Plan. 14 CPP-633 WCF HEPA Filter Storage 15 This was a waste pile storage unit (S03), for storage of spent HEPA filters from the WCF. The unit was located in Building CPP-633 at the INTEC. Closure 16 17 approved by the DEQ on 11/2/99, with the caveat that the substantive post-closure 18 care requirements for the WCF be addressed under the CERCLA ARARs under the final ROD and Post-ROD Monitoring Plan. 19 CPP-663 Hot Shop Storage Tank 20 21 This unit was a storage tank (VES-MA-101) located in Building CPP-663 at the 22 INTEC. This tank (S02) collected solvent waste from the hot shop. Closure 23 approved by the DEQ on 8/22/94. 24 CPP-666 Fluorinel Dissolution Process and Fuel Storage (FAST) Storage and Treatment 25 Tanks 26 This unit consisted of two storage (S02) and treatment (T01) tanks (VES-FA-141 27 and VES-FA-142) located in Building CPP-666 at the INTEC. Closure approved by the DEQ on 5/13/96. 28 29 Evaporators at TAN-607A and TAN-681 30 These units were classified as thermal treatment units (T04). The units dried the 31 waste in the drum in which the waste was disposed. TAN-607A Closure approved by the DEQ on 2/25/97. Closure for TAN-681 approved by the DEQ 32 33 on 12/20/96. 34 Hazardous Waste Storage Facility (HWSF) 35 This unit was a container storage (S01) area for hazardous waste, located at 36 Central Facilities Area (CFA), Building CFA-637. Closure approved by the DEQ

1 on 2/4/97. 2 Heat Transfer Reactor Experiment (HTRE)-3 Assembly 3 The HTRE-3 Assembly (S01) was located on a concrete pad northeast of 4 Experimental Breeder Reactor (EBR)-I. Closure approved by the DEQ on 5 1/31/00. 6 **ICPP Percolation Ponds** 7 This unit consisted of two percolation ponds (T02), located outside the INTEC 8 fenced area. Closure approved by the DEQ 11/29/95. 9 Initial Engine Test (IET) Mercury Storage 10 This unit was a container storage (S01) unit, located on a concrete pad at the south 11 end of the IET Facility. Closure approved by the DEQ on 12/20/96. 12 ILTSF - Pad 1 13 The ILTSF - Pad 1 was located at the RWMC and consisted of container storage 14 (S01). Closure approved by the DEQ on 10/24/94. 15 Naval Ordinance Disposal Area (NODA) Treatment 16 The NODA was a tract of land about 35 acres in size, located approximately 17 0.6 miles northeast of the INEEL gun range. Six treatment pits (T04) and one storage area (S01) were associated with this region. Closure approved by the 18 19 DEQ on 2/25/97. 20 Portable Water Treatment Unit (PWTU) 21 The PWTU was an ion exchange treatment (T04) system in a transportable trailer. 22 The unit was once located near the TAN facility and later located near the PBF/ 23 WROC reactor. The DEQ approved completion of closure activities on 7/8/99. 24 Process Experimental Pilot Plant (PREPP) Incinerator 25 This process consisted of the rotary kiln incinerator (T03) and its auxiliary 26 equipment, and was located within the middle and southern portions of Building 27 TAN-607. The DEQ approved completion of closure activities on 3/7/00. PREPP Waste Stabilization 28 29 This process consisted of stabilization (T04) unit equipment, and was located in 30 the southern portion of Building TAN-607. The DEQ approved completion of 31 closure activities on 3/7/00.

1 Reactives Storage and Treatment Area (RSTA) 2 The RSTA was located at the Auxiliary Reactor Area (ARA)-IV in the south-3 central portion of the INEEL, approximately 7.5 miles east of CFA. This unit 4 consisted of a container storage unit (S01) and a thermal treatment (T04) unit. 5 The thermal treatment unit was used once to treat reactive and explosive 6 hazardous waste. Closure approved by the DEO on 10/24/94. 7 Specific Manufacturing Capability (SMC) Waste Calciner, Stabilization and Storage 8 (TAN-681) 9 The SMC calciner (X03) unit thermally treated a slurry containing uranium 10 oxides, salts and metallic compounds. The Solidification/stabilization (T04) unit treated a depleted uranium oxide powder, containing heavy metals, using Portland 11 12 cement. A tank storage (S02) unit for waste storage prior to calcination and container storage (S01) unit for waste storage after calcination were also located at 13 TAN-681. Closure approved by the DEQ on 9/24/97. 14 TAN-647 Sodium Storage 15 16 This was a container storage (S01)unit, comprised of a sodium drain tank located 17 on a gravel-covered asphalt pad in the south half of Building TAN-647. Closure 18 approved by the DEQ on 6/13/97. 19 TAN-666 Storage and Treatment Units 20 Closed 10/20/94 21 TAN-726/726A Chromate Water Treatment and Storage 22 This unit consisted of a concrete vault containing two interconnected stainless 23 steel 50,000-gallon tanks, used for waste treatment and storage (T04, S02), within 24 Building TAN-726. Closure approved by the DEQ on 12/26/95. 25 Test Reactor Area (TRA)-610 Lead Storage 26 This was a container storage (S01) unit in one room within Building TRA-610. 27 Closure approved by the DEQ on 10/27/95. 28 Waste Engineering Development Facility (WEDF) Storage 29 This consisted of a container storage (S01) unit located within the cinder block walled area in the southwest corner of Building PER-612. Closure approved by 30 31 the DEQ on 12/22/97.

l	WEDF Waste Stabilization
2	This treatment (T04) unit was located in the WEDF solidification room, in Building PER-612. Closure approved by the DEQ on 12/22/97.
1	WERF Waste Storage/Feed Tanks
5	This unit storage/treatment unit (S02, T01) was never constructed. It was
5	anticipated to be a tank system with associated piping, to expand the blending and
7	treatment capability of the WERF Drum Feed/Blending Unit. The DEQ approved
3	administratively closure of this unit on 5/16/00.

Appendix B

Historical Information

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Historical Information

Under Title 40, Code of Federal Regulations (CFR), Part 270.73(g), interim status terminates for any facility (other than land disposal or incineration) on November 8, 1992, unless the Resource Conservation and Recovery Act (RCRA) Part B permit application for the facility was submitted by November 8, 1988. Furthermore, the Environmental Protection Agency (EPA) published a clarification notice in the September 23, 1988 Federal Register (FR) that radioactive mixed waste management units in existence on or before July 3, 1986, may be granted interim status if the RCRA Part A permit application was submitted by March 23, 1989. The Idaho National Engineering and Environmental Laboratory (INEEL) submitted a revised RCRA Part A permit application for the RCRA units at the INEEL, on November 8, 1988, which included all hazardous waste management units and many radioactive mixed waste management units potentially subject to RCRA regulations. A revised Part A permit application, submitted on March 23, 1989, included all radioactive mixed waste units potentially subject to RCRA regulations. RCRA Part B permit applications have been submitted previously to EPA Region X for a number of units at the INEEL. The State of Idaho has been authorized by the EPA to implement the EPA's hazardous waste management program under the Hazardous Waste Management Act (HWMA). The Idaho Department of Health and Welfare (IDHW), Division of Environmental Quality (DEQ) administers the program for the state and has authority to issue HWMA/RCRA operating permits which comply with state and federal laws. The DEQ issued a letter dated March 19, 1991, which stated that the units listed in the September 1990 Part A permit application were under interim status, thereby approving the RCRA Part A Permit for the INEEL. The number of units on the 1988 Part A permit application precluded the completion of a Part B permit application by November 8, 1988, that met all the requirements of 40 CFR 270; no schedule had yet been established by EPA Region X for completion of the Part B permit applications for the radioactive mixed waste units at the INEEL. Therefore, the INEEL HWMA/RCRA Work Plan was originally prepared and submitted to EPA Region X, in November 1988, to provide a schedule for revising the existing INEEL RCRA Part B permit application, and supplementing the application, to include the requisite information for the additional units for which final operating permits are sought. Thus, the November 1988 work plan was intended to fulfill the filing requirements to maintain interim status through 1992 and beyond, for the waste management units identified on the revised Part A permit application. In

April 1989, the work plan was revised to incorporate additional radioactive mixed waste management units

included in the March 1989 Part A permit. The November 1990 work plan incorporated changes included 1 2 in the September 1990 Part A permit and revised the proposed permit application schedule. The April 3 1991 and October 1992 work plan revisions incorporated changes to the Part A permit and revised the proposed permit application schedule. The December 1993 work plan revision incorporated format 4 5 changes, changes to the Part A permit, and revised the proposed permit application schedule. May 1994 6 and June 1995 work plan revisions incorporated changes to the Part A permit and closure schedules. The 7 October 1997, the draft April and September 1999 and Final December 1999 revisions of the work plan 8 incorporate format changes as well as Part A permit changes and closure schedule changes. The January 9 31, May 31, and June 6, 2000 versions of the work plan incorporate changes in interim status units due to 10 approved RCRA closures and interim status units receiving RCRA Part B Partial Permits. 11 Each volume of the HWMA/RCRA Part B permit application will be submitted to the DEQ by the 12 DOE approved M&O contractor. The HWMA/RCRA Part B permit applications will be prepared in a 13 series of supplements (volumes). 14 The RCRA Part B permit application for the INEEL was originally submitted in October 1985, to 15 EPA Region X, and addressed the following waste management units: Hazardous Waste Storage Facility 16 (HWSF) at CFA-637; Radioactive Mixed Waste Storage Facility (RMWSF) at Special Power Excursion 17 Reactor Test (SPERT)-IV; Waste Experimental Reduction Facility (WERF) Incinerator at SPERT-III; 18 Hazardous and Mixed Waste Storage/Blending Tanks for waste feed to the WERF Incinerator at SPERT-19 III; and Waste Stabilization (solidification) at WERF (SPERT-III). Additionally, in 1985, a separate 20 RCRA Part B permit application was prepared and submitted to the DOE-ID (as classified information) for a storage facility at the Specific Manufacturing Capability (SMC) area of the INEEL. 21 22 The 1985 RCRA Part B permit application was revised in March 1986, in response to deficiencies 23 identified by the EPA permit writer [December 1985 Notice of Deficiency (NOD)]. The March 1986 24 revision also documented replacement of the Waste Feed Storage/Blending Tanks at the WERF, with a 25 two-drum waste feed/blending station. 26 A supplement to the INEEL RCRA Part B permit application was submitted to EPA Region X, in 27 November 1986, to add the Process Experimental Pilot Plant (PREPP) Incinerator, the PREPP Waste 28 Stabilization Unit, and associated waste storage and waste storage/blending units. The application was 29 further revised in November 1986, in response to deficiencies identified by EPA Region X (March 1987 30 NOD). This revision also incorporated three units not previously addressed: Waste Experimental 31 Development Facility (WEDF) Waste Stabilization at SPERT-II, and two separate storage units for liquids

- and solids at the PREPP. The five-volume November 1987 submittal replaced all RCRA Part B materials
 previously submitted.
- In 1986 and 1987, Land Disposal Units (LDUs) were added to the INEEL Part A permit application,
- 4 in compliance with the Consent Order and Compliance Agreement (COCA) for the INEEL. Thirty LDUs
- 5 were identified under the COCA. The COCA was later replaced by the Federal Facilities Agreement and
- 6 Consent Order (FFA/CO), on December 9, 1991. The LDUs will all be evaluated under the FFA/CO.
- 7 Units retaining the HWMA/RCRA LDU designation will be remediated, if necessary, under the
- 8 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process, in
- 9 accordance with the applicable substantive requirements of HWMA/RCRA (acceptable risk to human
- 10 health or the environment).

Appendix C

Hazardous Waste Management Act/
Resource Conservation and Recovery Act
Permitting Point of Contact Matrix

Hazardous Waste Management Act/Resource Conservation and Recovery Act Permitting Point of Contact

Volume Number	Waste Management Unit Description	Unit Location	Unit Status	INEEL Point of Contact	DOE Point of Contact	DEQ Point of Contact
1	Hazardous Waste Management Act (HWMA)/Resource Conservation and Recovery Act (RCRA) Part A Permit Application for the Idaho National Engineering and Environmental Laboratory (INEEL).	INEEL site-wide	Bechtel BWXT Idaho, LLC (BBWI) Responsible Operator	Pam Cunningham 208-526-0300	Nicole Brooks 208-526-0709	Vivien Hall 208-373-0137
2	HWMA/RCRA Part A Permit Application for the INEEL - Argonne National Laboratory-West (ANL-W).	INEEL - ANL-W	ANL-W Responsible Operator	Maureen Finnerty 208-533-7924	Gregg Bass 208-533-7184	TBD
3	General Information for INEEL Waste Management Units	INEEL	BBWI operator	Darrell Lake 208-526-7005 Pam Cunningham 208-526-0300	Nicole Brooks 208-526-0709	TBD
4	ANL-W Storage Units					
	Radioactive Scrap and Waste Facility (RSWF)	ANL-771	Permitted 1/24/94	Maureen Finnerty 208-533-7924	Greg Bass 208-533-7184	Beth McPherson 208-373-0483
	Radioactive Sodium Storage Facility (RSSF)	ANL-797	Permitted 1/24/94			
	Hot Fuel Examination Facility (HFEF)	ANL-785	Permitted 12/99			
	Building 703, Sodium Storage Building (SSB)	ANL-703	Permitted 12/99			
5	Intermediate-Level Transuranic Storage Facility (ILTSF) - Pad 2	RWMC	Permitted 11/13/95	Sharon Jacobo 208-526-2265	Nicole Brooks 208-526-0709	TBD0
	Radioactive Waste Management Complex (RWMC) Waste Storage Facility	RWMC	Permitted 11/13/95			
	Transuranic Storage Area (TSA)-3 [Stored Waste Examination Pilot Plant (SWEPP)]	RWMC	Permitted 9/30/96			
6	New Waste Calcining Facility (NWCF) Calciner	Idaho Nuclear Technology and	Interim Status	Paul Smith 208-526-0611	Nicole Brooks 208-526-0709	TBD
		Engineering Center (INTEC) CPP-659			Don Rasch 208-526-1511	
	NWCF Evaporator Tank System	INTEC CPP-659	Interim Status			
	NWCF Storage & Treatment Tanks	INTEC CPP-659	Interim Status			
7	Hazardous Waste Storage Facility (HWSF)	Central Facilities Area (CFA)-637	Closed 2/4/97	Ann Boehmer 208-526-7937	N/A	N/A

Volume Number	Waste Management Unit Description	Unit Location	Unit Status	INEEL Point of Contact	DOE Point of Contact	DEQ Point of Contact
8	Hazardous Chemical Waste Handling and Neutralization Facility (HCWHNF)	INTEC CPP-620 Annex	Permitted 5/1/95	Scott Reno 208-526-6163	Dave Wessman 208-526-0082	TBD
9	Waste Experimental Reduction Facility (WERF) Incinerator	Power Burst Facility (PBF) Special Power Excursion Reactor Test (SPERT)-III	Interim Status	Tim Solle 208-526-8568 or 208-526-4601	Nicole Brooks 208-526-0709 Don Rasch 208-526-1511	Brian English 208-373-0425
	WERF Waste Stabilization	PBF/SPERT-III	Interim Status			
	WERF Repackaging	PBF/SPERT-III	Interim Status			
10	Liquid Effluent Treatment & Disposal (LET&D) Evaporators	INTEC CPP-1618	Interim Status to be requested	Ann Boehmer 208-526-7937	Nicole Brooks 208-526-0709	TBD
	LET&D Storage Tank	INTEC CPP-1618	Interim Status			
	LET&D Nitric Acid Recycle Tank	INTEC CPP-1618	Interim Status			
11	Mixed Waste Storage Facility (MWSF)	PBF/SPERT-IV	Permitted 1/27/00	Tim Solle	Nicole Brooks	Beth McPherson
	MWSF Portable Storage Units	PBF/SPERT-IV	Permitted 1/27/00	208-526-8568 or 208-526-4601	208-526-0709	208-373-0483
	WERF Waste Storage Building	PBF/SPERT-III	Permitted 1/27/00			
	Test Area North (TAN) Hazardous Waste Storage Area (THWS)	TAN-628	Permitted 1/27/00			
	WERF Macroencapsulation	PBF/SPERT-III	Permitted 1/27/00			
	WERF Sizing	PBF/SPERT-III	Permitted 1/27/00			
12	THWS (This unit was incorporated into Volume 11 in January of 1999. Volume 12 is no longer needed.)	TAN-628	See Volume 11 information	Tim Solle 208-526-8568 or 208-526-4601	Nicole Brooks 208-526-0709	TBD
13	Transuranic Storage Area-Retrieval Enclosure (TSA-RE) Retrieval Modification Facility (RMF)	RWMC	Interim Status	Sharon Jacobo 208-526-2265	Nicole Brooks 208-526-0709	N/A
	Waste Characterization Facility (WCF)	RWMC	Interim Status			
	(These units will not be permitted)					
14	Process Equipment Waste (PEW) Evaporator	INTEC CPP-604	Interim Status	Ann Boehmer 208-526-7937	Nicole Brooks 208-526-0709	TBD
	PEW Feed Storage and Treatment Tanks CPP-601 WG/WH C CPP-604 Tank Farm Tanks (VES-WM- 100, -101, -102)	INTEC CPP-604 INTEC CPP-604	Interim Status Interim Status	200 020 1701	255 525 5767	

Volume Number	Waste Management Unit Description	Unit Location	Unit Status	INEEL Point of Contact	DOE Point of Contact	DEQ Point of Contact
TBD	Calcined Solids Storage Facility (CSSF)	INTEC	Interim Status	Paul Smith 208-526-0611	Nicole Brooks 208-526-0709	TBD
15	Army Reentry Vehicle Facility Site (ARVFS) Sodium-Potassium Waste Treatment - Closed	ANL-793	Closed 9/9/94	Maureen Finnerty 208-533-7924	NA	Beth McPherson 208-373-0483
	Sodium Components Maintenance Shop (SCMS)	ANL-793	See Volume 16			
	(These units were incorporated into Volume 16. This volume is no longer needed.)					
16	ANL-W Treatment Units					
	Sodium Process Facility (SPF)	ANL-799	Permitted 4/97	Mike Holzemer 208-533-7625	Greg Bass 208-533-7184	Beth McPherson 208-373-0483
	Sodium Components Maintenance Shop (SCMS)	ANL-793	Interim Status	Maureen Finnerty 208-533-7924	200-333-7104	200-373-0403
	Remote Treatment Facility (RTF)	ANL-785	New Unit	Maureen Finnerty 208-533-7924		
17	Radioactive Mixed Waste Staging Facility (RMWSF)	INTEC CPP-1617	Interim Status	Alan Carvo 208-526-1170	Nicole Brooks 208-526-0709	Beth McPherson 208-373-0483
	Hazardous Chemical & Radioactive Waste Storage Facility (HCRWSF) NOTE: The information in this Volume will be added into the Volume 18 RCRA Partial Permit within 180 days of its issuance, per request of the DEQ.	INTEC CPP-1619	Interim Status			
18	NWCF High Efficiency Particulate Air (HEPA) Filter Storage	INTEC CPP-659	Interim Status	Alan Carvo 208-526-1170	Nicole Brooks 208-526-0709	TBD
	NWCF HEPA Filter Leach System	INTEC CPP-659	Interim Status			
	NWCF Debris Treatment	INTEC CPP-659	New Unit			
	Fluorinel Dissolution Process and Fuel Storage (FAST) HEPA Filter Storage	INTEC CPP-666	Interim Status			
	NWCF Storage & Treatment Tanks	INTEC CPP-659	Interim Status			
19	WERF Macroencapsulation	PBF/SPERT-III	New Unit	Tim Solle	Nicole Brooks	TBD
	WERF Sizing	PBF/SPERT-III	New Unit	208-526-8568 or 208-526-4601	208-526-0709	
	(These units were incorporated into Volume 11 in January of 1999. Volume 19 is no longer needed.)					
N/A (BNFL)	HWMA/Toxic Substances Control Act (TSCA) Part B Permit Application for the Advanced Mixed Waste Treatment Facility (AMWTF)	RWMC	New Unit	Malone Steverson 208-528-2149	Greg Hula 208-526-9899	Brian English 208-373-0425